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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,611	06/23/2003	Kinya Aota	503.35255V12	9607

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EXAMINER

STONER, KILEY SHAWN

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/600,611

Applicant(s)

AOTA ET AL.

Examiner

Kiley Stoner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 3 is/are allowed.
- 6) ☒ Claim(s) 2 and 4-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 08/820,231.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Terminal Disclaimer***

The terminal disclaimer filed on 3-22-05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/600,576 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2, 4-6 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The applicant is claiming: a backing member and a vehicle which were not originally claimed in 08/820,231, yet this application is somehow a divisional of 08/820,231.

The "backing member" limitation is not present in the original application.

The term "vehicle" is broader than the railway car that the applicant has support for in 08/820,231. So, the term "vehicle" is considered new matter.

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This subject matter is not described in the specification. This subject matter is also not found in the parent application 08/820,231 including the originally filed claims. If the applicant attempts to put these limitations in the instant application, the examiner will have to make a new matter rejection unless the applicant is able to convince the examiner that the claimed subject matter has been previously disclosed.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Midling et al. (WO 95/26254).

Midling et al. teaches a structure body, comprising: a first plate and a second plate, welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is arranged as an outer face of said structure body (Figures 5a-5e). A friction stir weld will have the same strength whether it is facing toward or away from something. When orientation does not matter is becomes obvious

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to one of ordinary skill in the art to have the most ascetically pleasing surface facing towards a direction in which it is going to be viewed. That's why you don't see welds on the outside of automobiles.

The outer face of the structural body is relative to the direction in which the body is being viewed and does not structurally limit the article. The applicant has failed to establish a frame of reference for the outer face.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al. (5,460,317) of the IDS. Thomas et al. teaches a structure body, comprising: a first plate and a second plate, welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is arranged as an outer face of said structure body (Figures).

A friction stir weld will have the same strength whether it is facing toward or away from something. When orientation does not matter it becomes obvious to one of ordinary skill in the art to have the most ascetically pleasing surface facing towards a direction in which it is going to be viewed. That's why you don't see welds on the outside of automobiles.

The outer face of the structural body is relative to the direction in which the body is being viewed and does not structurally limit the article. The applicant has failed to establish a frame of reference for the outer face.

Claim 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over The 2<sup>nd</sup> International Forum of Aluminum Ships of the IDS. The International Forum teaches a structure body, comprising: a first plate and a second plate, welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is arranged as an outer face of said structure body (Figure 4); and a vehicle, comprising: a first plate and a second plate welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is arranged as an outer face of said vehicle (Figure 4 and the title).

A friction stir weld will have the same strength whether it is facing toward or away from something. When orientation does not matter is becomes obvious to one of ordinary skill in the art to have the most ascetically pleasing surface facing towards a

direction in which it is going to be viewed. That's why you don't see welds on the outside of automobiles.

The outer face of the structural body is relative to the direction in which the body is being viewed and does not structurally limit the article. The applicant has failed to establish a frame of reference for the outer face.

Claim 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welding & Metal Fabrication of the IDS. Welding & Metal Fabrication teaches a structure body, comprising: a first plate and a second plate, welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is arranged as an outer face of said structure body (Figure 1); and a vehicle, comprising: a first plate and a second plate welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is arranged as an outer face of said vehicle (Figure 1 and page 4, column 1).

A friction stir weld will have the same strength whether it is facing toward or away from something. When orientation does not matter is becomes obvious to one of

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ordinary skill in the art to have the most ascetically pleasing surface facing towards a direction in which it is going to be viewed. That's why you don't see welds on the outside of automobiles.

The outer face of the structural body is relative to the direction in which the body is being viewed and does not structurally limit the article. The applicant has failed to establish a frame of reference for the outer face.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bulletin 6 of the IDS. Bulletin 6 teaches a structure body comprising: A structure body, comprising: a first plate and a second plate, welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is arranged as an outer face of said structure body (Figures 3-4 and page 3, column 3); and a vehicle, comprising: a first plate and a second plate welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is arranged as an outer face of said vehicle (Figures 3-4 and page 3, column 3).



A friction stir weld will have the same strength whether it is facing toward or away from something. When orientation does not matter is becomes obvious to one of ordinary skill in the art to have the most ascetically pleasing surface facing towards a direction in which it is going to be viewed. That's why you don't see welds on the outside of automobiles.

The outer face of the structural body is relative to the direction in which the body is being viewed and does not structurally limit the article. The applicant has failed to establish a frame of reference for the outer face.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Childress (5,862,975). Childress teaches a structure body, comprising: a first plate and a second plate, welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is arranged as an outer face of said structure body (Figures 1-2; column 1, lines 13-18; column 2, lines 39-51 and claim 2); and a vehicle, comprising: a first plate and a second plate welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion connected to said welding portion at said one side and projecting to said one side of said first plate, a face of a side of said welding portion opposed to said one side is formed substantially flat by the friction stir welding, and said face of said side opposed to said one side is

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arranged as an outer face of said vehicle (Figures 1-2; column 1, lines 13-18; column 2, lines 39-51 and claim 2).

A friction stir weld will have the same strength whether it is facing toward or away from something. When orientation does not matter is becomes obvious to one of ordinary skill in the art to have the most ascetically pleasing surface facing towards a direction in which it is going to be viewed. That's why you don't see welds on the outside of automobiles.

The outer face of the structural body is relative to the direction in which the body is being viewed and does not structurally limit the article. The applicant has failed to establish a frame of reference for the outer face.

### ***Allowable Subject Matter***

Claims 1 and 3 are allowed.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection. The 102 rejections of claims 7-8 has been changed to an obvious type 103 rejections.

The outer face of the structural body is relative to the direction in which the body is being viewed and does not structurally limit the article. The applicant has failed to establish a frame of reference for the outer face. Outer with respect to what portion of the body?

The applicant argues that the phrase "outer face" has a definite meaning in the art, as being opposite an inner face and, e.g., being exposed to the outside, and it is respectfully submitted that the outer face does structurally limit the article. If you have a structural body sitting upright from the ground and is not connected to anything, how can you determine what side is the outer face, at least until it is assembled or connected to something? This proves that outer face is relative until a reference frame is determined for the outer face.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiley Stoner whose telephone number is (571) 272-1183. The examiner can normally be reached on Monday-Thursday (7:30 a.m. to 6:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on Monday-Friday at (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**KILEY S. STONER**  
**PRIMARY EXAMINER**

*Kiley Stoner* 3/31/05